Amendments to the Claims:

Please amend the claims as indicated.

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Previously Presented) A process for utilizing tape storage media segmentation to improve data access performance, the process comprising:

providing a tape storage device having a tape storage medium, the tape storage medium formatted with a serpentine recording path and divided into sixteen head index positions, each head index position including thirty-two tracks;

accessing at least one of a first segment and a second segment on the tape storage medium;

allowing a user to select a user-defined capacity of the tape storage medium that is equivalent to the capacity of the first segment of the tape storage medium and that is less than a usable capacity of the tape storage medium; and

identifying a tape storage device as full when the user-defined capacity of the tape storage medium is used to store the data and to mark the tape storage medium as full.

13. (Canceled)

14. (Canceled)

15. (Original) The process of claim 12, wherein allowing a user to select a user-defined capacity further comprises allowing the user to select the user-defined capacity of the tape storage medium before the data has been stored on the tape storage medium.

16. (Original) The process of claim 12, wherein allowing a user to select a user-defined capacity further comprises allowing the user to select the user-defined

capacity of the tape storage medium after the data has been stored on the tape storage medium.

17. (Original) The process of claim 12, further comprising associating the user-defined capacity of the tape storage medium with the tape storage device.

18. (Original) The process of claim 12, further comprising writing data to the tape storage medium within the user-defined capacity.

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)